



WELCOME



DOE Workshop on Possible Designation of Fischer-Tropsch Diesel Fuels as Alternative Transportation Fuels under the Energy Policy Act of 1992

October 16, 2002

Stephen J. Goguen

Team Leader, Fuels, OFCVT



CIDI Program Technologies

Fuels

- *Sulfur Effects on Emission Control Catalysts*
- *Oxygenate development*
- *Advanced Petroleum Based fuels and lube effects on emissions*
- *Fuel Sulfur Trap*



Combustion

- *Combustion improvements for reduced emissions & improved fuel economy*
- *EGR*
- *Modeling*
- *HCCI*

NO_x

- *Lean-burn catalysts*
- *NO_x Traps*
- *Non-thermal Plasma*
- *Selective Catalytic Reduction*

Emission Control

Particulates

- *Regenerative PM Traps*
 - *Catalytic*
 - *Microwave*
- *Non-Thermal Plasma*

Enabling Technologies

- *Sensors*
- *Sulfur Traps (gas)*



Advanced Petroleum-Based Fuels Activity



- Advanced petroleum-based fuels are a critical enabler to allow the high fuel economy of diesel-powered vehicles to be maintained while meeting future emission standards
 - High fuel economy light trucks and SUVs
 - High fuel economy medium- and heavy-duty trucks that meet EPA emissions regulations
 - Enable CIDI engines to achieve even lower emissions beyond EPA Tier II
 - Incorporate domestic feedstocks as neat fuels and blending agents into petroleum-based diesel fuel



Energy Policy Act of 1992



- Alternative transportation fuels utilization addressed in EPACT Titles III, IV, V and VI. Titles III and V are most relevant.
- EPACT seeks to promote both alternative fuels (those used in high percentages) and other “replacement fuels” - non-petroleum fuels used in conventional vehicles including lower level blends.



EPAct (cont.)



- All of the alternative fuels listed in the statute require special vehicles; replacement fuels are used in conventional vehicles.
- Most of the statutory programs of Titles III and V relate to acquisition of AFVs for the alternative fuels.
- FTD, if designated, would be first alt. fuel for use in conventional vehicles. (Biodiesel has special provision, not an alt. fuel.)



Today's Workshop



- Part of first formal step in the rulemaking process (technical review and evaluation).
- Opportunity to get input from stakeholders and public on key technical areas before going forward with Notice of Proposed Rulemaking (NoPR).



Following Workshop



- Comments received until Nov. 15
- DOE will review all comments including those from this workshop and those submitted in writing to the docket and decide whether to go forward with a Notice of Proposed Rulemaking to designate FTD as an alternative fuel.



To Date



- DOE has identified a considerable body of data relating to FTD environmental and energy security impacts, which is generally promising.
- DOE analysis has also raised a number of questions. This workshop and comment period were designed to help DOE get public input and answers to these questions.